Agrisera
Part of Olink® Group

This product is **for research use only** (not for diagnostic or therapeutic use) **contact: support@agrisera.com**

Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

Product no AS14 2760

CsoS1A/B/C | Major carboxysome shell protein 1A, AB, 1C

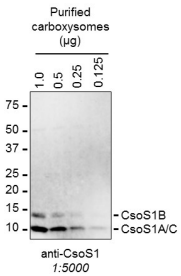
Product information

Immunogen	KLH-conjugated peptide conserved in Major carboxysome shell protein 1A, UniProt: P45689, Major carboxysome shell protein 1B UniProt: P45690, Major carboxysome shell protein 1C, UniProt: P45688
Host	Rabbit
Clonality	Polyclonal
Purity	Immunogen affinity purified serum in PBS pH 7.4.
Format	Lyophilized
Quantity	50 µg
Reconstitution	For reconstitution add 50 µl of sterile water
Storage	Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

Application information

Recommended dilution	1 : 5000 (WB)
Expected | apparent MW	9-11 kDa
Confirmed reactivity	*Halothiobacillus neapolitanus* (strain ATCC 23641 / c2) (*Thiobacillus neapolitanus*)
Predicted reactivity	Algae (red), Cyanobacteria, Cryptomonads Species of your interest not listed? Contact us
Not reactive in	*Synechococcus elongatus*
Selected references	Huang, Jiang, Yang, et al. (2022) Probing the Internal pH and Permeability of a Carboxysome Shell. Biomacromolecules. 2022;23(10):4339-4348. doi:10.1021/acs.biomac.2c00781 Chen et al. (2022) ACS Synth. Biol. 2022, 11, 1, 154-161Publication Date:October 19, 2021 https://doi.org/10.1021/acssynbio.1c00311 Li et al. (2020). Reprogramming bacterial protein organelles as a nanoreactor for hydrogen production. Nat Commun. 2020 Oct 28;11(1):5448. doi: 10.1038/s41467-020-19280-0. PMID: 33116131; PMCID: PMC7595155. Long et al. (2018). Carboxysome encapsulation of the CO2-fixing enzyme Rubisco in tobacco chloroplasts. Nat Commun. 2018 Sep 3;9(1):3570. doi: 10.1038/s41467-018-06044-0.

application example



0.125 - 1.0 µg of total purified *Halothiobacillus neapolitanus* carboxysome protein (equivalent to approximately 20 - 170 ng CsoS1A, B and C proteins) were separated on 4-20 % Bio-Rad TGX stain-free SDS-PAGE and blotted 1h to PVDF using a Bio-Rad TransBlot Turbo Blotting System. Blots were blocked with 5% skim milk powder in TBS-T for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1:5 000 for 1h at RT with agitation. The antibody solution was decanted and the blot was rinsed 3 times for 5 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (goat-anti-rabbit IgG alkaline phosphatase conjugated) diluted to 1:5 000 in TBS-T for 1h at RT with agitation. The blot was washed as above and antibody binding determined using the Promega Attophos reagent system as described by the manufacturer. Reaction time was 10 seconds and membranes were imaged using a Bio-Rad VersaDoc.

Courtesy of Dr. Ben Long, The Australian National University, Australia